Comments

- 1. Sections 1.1 and 2.1, and repeated throughout document. The name of the NPL site is **Oak Ridge Reservation (USDOE)**, per the original rule, published in 48184 48189 Federal Register / Vol. 54, No. 223 / Tuesday, November 21, 1989. The D1 ROD consistently identifies the site as Oak Ridge NPL site, rather than using the correct term Oak Ridge Reservation (USDOE) NPL site. Abbreviating the site name is acceptable, but the correct term should be used in Sections 1.1 and 2.1, and the abbreviation defined. [HYPERLINK "https://semspub.epa.gov/work/HQ/189634.pdf"]
- 2. It is worth noting that the RI/FS was not approved by the FFA parties, rather, in the December 2017 dispute resolution agreement the parties agreed to move forward with the Proposed Plan. Suggest adding a footnote to the first reference to the RI/FS (DOE 2017a), located in Section 1.2, providing this explanation.
- 3. Section 2.4. The test states: "The selection of the remedial action involving onsite disposal at EMDF in BCV is consistent with the recommendations made by EUWG; however, the EUWG recommendation favored those areas already contaminated..." This statement does not reflect the EUWG recommendation, which specifically identifies CBCV within Zone 2. Suggested text: "Notwithstanding the EUWG recommendation favoring placement of long-term waste disposal facilities in areas already contaminated or near areas of contamination, for a variety of technical reasons discussed under Sect. 2.12.1, the FFA parties believe that CBCV is the preferred location for the landfill."
- 4. Section 2.5.3 and Figure 2.3. Though the text refers to drainage feature D-11 East, the figure does not include drainage feature D-11 East. (None of the figures include D-11 East.) Please update figures.
- 5. Section 2.5.4. Please describe the area of the wetland delineation study. It is variously referred to as "a broader area" and "expanded study area" but the area is not described or depicted in a figure.
- 6. Section 2.9.2. The description of the four sites evaluated for potential location of EMDF use different terminology than the figure 2.2. Help the reader match the four locations to the figure. For example:
 - East Bear Creek Valley (EBCV) site, just east of the existing EMWMF (labeled site 5 on figure 2.2)
 - West Bear Creek Valley (WBCV) site, located approximately 2.5 miles west of the existing EMWMF (site 14)
 - Dual site, which includes a site beside and to the west of the existing EMWMF, and a second site in CBCV, located 1.5 miles west of the existing EMWMF (site 6b and 7a)
 - CBCV, expansion of one of the dual sites (site 7c).
- 7. Table 2.1, Short-term effectiveness: The table includes collection of leachate in a leachate collection system, but does discuss treatment of leachate, and does not discuss collection and treatment of contaminated stormwater (also known as "contact water").
- 8. Section 2.10.5 discusses short-term environmental effects of onsite disposal, such as land disturbance and loss of habitat, however, it does not address impacts of increased stormwater or discharges of landfill wastewater to Bear Creek or tributaries to Bear Creek.

- 9. Section 2.10.9. The text states "Although the SSAB did not submit comments during the public comment period, they had provided earlier endorsement of the EMDF." Please provide clarification. In what form did the SSASB provide endorsement?
- 10. Section 2.10.10. What are the NEPA requirements for this decision/action? Does this section represent a NEPA analysis? Please define the term "NEPA values." Briefly describe the role of NEPA in this decision. Was a NEPA Environmental Assessment or Environmental Impact Statement prepared; or not required? This section does not include discussion of habitat loss, especially with regards to threatened or endangered species, and does not discuss impact to water quality or habitat at BC.
- 11. Environmental Justice. There is one paragraph in the D1 ROD addressing Environmental Justice (located in the "NEPA Values" section). As written, the D1 ROD insufficiently addresses environmental justice. EJ is about the disproportionate environmental burdens on a community from cumulative environmental impacts, not limited to the particular decision at hand (EMDF). An evaluation is needed to identify communities with potential environmental justice concerns. If communities with environmental justice concerns are present, further evaluation of the concerns and appropriate responses may be needed. EPA has provided some resources on this matter, and is available for further consultation.
- 12. Section 2.12, third paragraph. Specify that restricted recreational use is selected for Zone 1 for short and long term, and state the rationale for that change. Land use is not being changed from unrestricted to restricted recreational because there are *no trespassing* signs; rather, the land use change is being made to provide a buffer between the landfill and potential human access (or other reason that should be stated). The text states that fish consumption advisories and prohibitions on fishing are in place, but please include the reasons for the advisories and prohibitions, and whether these advisories and access (no trespassing) prohibitions needed in the long term?
- 13. Figure 2.5. Please label D-11 East. It is discussed in the text, but not shown on the figures. Will there be a settling basin for uncontaminated stormwater (non-contact water)?
- 14. Section 2.12.2, last bullet. The text states that the remedy includes "Change of the initial land use designation used to set remediation goals in BCV Zone 2 to future DOE-controlled industrial land use of the area." Additional text should be added to indicate that the land use designation for BCV Zone 1 is also being changed, in this case, from unrestricted to restricted recreational.
- 15. In general, there is no discussion of the anticipated or potential impacts to the Bear Creek riparian system. Will tree clearing for the landfill impact the creek (loss of shade, erosion, siltation, etc)? How will additional stormwater due to land clearing impact Bear Creek? How will construction activities, rerouting the roads, etc., impact Bear Creek?
- 16. Section 2.12.2.3 Waste Acceptance Criteria. This section will be updated consistent with the agreements currently being negotiated by FFA parties.

- 17. Table 2.4 Administrative WAC. It's my understanding that mercury waste that is also RCRA hazardous waste by characteristic (i.e. toxicity) will be prohibited; please add to the table. Recoverable elemental mercury is prohibited from disposal.
- 18. Carl/Jon are we concerned with the statement: in compliance with the dose criteria ARAR associated with the NRC-based performance objective for releases from LLW disposal facilities at TDEC 0400-20-11-.16(2) [10 *CFR* 61.41] Is this acceptable to EPA given the acceptable CERCLA risk range?
- 19. Mercury Management Approach please replace this section with the approach agreed to by the FFA parties.
- 20. The term "wastewater" should be defined in the ROD as "leachate and contaminated stormwater (also known as contact water)." Section 2.12.2.4 may be the appropriate place for this clarification. For example: Landfill wastewater from EMDF, defined as landfill leachate and contaminated stormwater (also referred to as contact water), will be stored and sampled.
- 21. Section 2.12.3. Please update the cost estimate to reflect 2021 life cycle costs and 2021 present worth rather than 2016 costs. Carl I think Tech Law covered this topic.
- 22. Section 2.13.2 Compliance with ARARs. The text states:

The following NRC-based TDEC regulations are relevant and appropriate: TDEC 0400-20-11-.16(2) [equivalent to 10 *CFR* 61.41] and TDEC 0400-20-11-.16(4) [equivalent to 10 *CFR* 61.43]. These ARARs are used along with site-specific parameters to develop limits on radiological discharges during operations that ensure protection of human health and the environment.

The text should be revised to state that Tennessee and the EPA NPDES regulations that pertain to water-quality based effluent limitations and the Tennessee Water Quality Standards regulations establishing designated uses and criteria to protect those uses are relevant and appropriate requirements to the discharge of radionuclides in wastewater.

The 12/30/20 Administrator's decision states:

...regulations that establish water quality based effluent limitations under the *Clean Water Act* National Pollutant Discharge Elimination System program as well as Tennessee's NPDES regulations for establishing water quality-based effluent limitations, certain Tennessee Water Quality Standards regulations and certain Nuclear Regulatory Commission regulations for low-level radioactive waste disposal are relevant and appropriate requirements for purposes of establishing preliminary remediation goals...for addressing discharges containing radionuclides from two CERCLA on-site landfills at ORR.

- 23. Section 2.13.3 Cost Effectiveness. The total present worth cost is based on a 2016 estimate; please update for 2021.
- 24. Section 2.14 Documentation of Significant Changes. Please not that the Proposed Plan was released in September 2018, as the date provides context for the rest of the discussion in this section.

25. The ROD includes an evaluation of greenhouse gas emissions for the offsite disposal alternative. EPA recommends also including in the ROD a discussion of the potential impacts of climate change on the proposed remedy, including potential changes in rainfall, storm events and hydrologic conditions, and climate resiliency measure to be addressed in the design and construction of the remedy.